

Std Library Function	Meaning
char s[n]	$n \subseteq \text{alloc}(s)$
strlen(s)	$\text{len}(s) - 1$
strcpy(dst, src)	$\text{len}(\text{src}) \subseteq \text{len}(\text{dst})$
strncpy(dst, src, n)	$\max(\text{len}(\text{src}), n) \subseteq \text{len}(\text{dst})$
s = "string"	$7 \subseteq \text{len}(s), 7 \subseteq \text{alloc}(s)$
p = malloc(n)	$n \subseteq \text{alloc}(p)$
p = strdup(s)	$\text{len}(s) \subseteq \text{len}(p), \text{alloc}(s) \subseteq \text{alloc}(p)$
strcat(s, suffix)	$\text{len}(s) + \text{len}(\text{suffix}) - 1 \subseteq \text{len}(s)$
strncat(s, suffix, n)	$\text{len}(s) + \min(\text{len}(\text{suffix}) - 1, n) \subseteq \text{len}(s)$
p = getenv(. . .)	$[1, \infty] \subseteq \text{len}(p), [1, \infty] \subseteq \text{alloc}(p)$
gets(s)	$[1, \infty] \subseteq \text{len}(s)$
fgets(s,n)	$[1, n] \subseteq \text{len}(s)$
sprintf(dst, "%s", src)	$\text{len}(\text{src}) \subseteq \text{len}(\text{dst})$
sprintf(dst, "%d", n)	$[1, 20] \subseteq \text{len}(\text{dst})$
snprintf(dst, n, "%s", src)	$\min(\text{len}(\text{src}), n) \subseteq \text{len}(\text{dst})$
p[n] = '\0'	$\min(\text{len}(p), n + 1) \subseteq \text{len}(p)$
h = gethostbyname(. . .)	$[1, \infty] \subseteq \text{len}(), [-\infty, \infty] \subseteq (\text{h} \rightarrow \text{h_length})$

Table 1